

REMARKS:

Claims 21-34 are currently pending in the application. Claims 35-69 have been previously withdrawn. Claims 21-34 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 78-92 of copending Application No. 10/829,790. Claims 21, 23, 24, 29, and 30 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,349,975 issued to Valdner. Claims 21 and 22 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 2,960,094 issued to Small. Claims 25 and 26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Small in view of WO 93/00840 to Perrier et al. Claims 27 and 28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Small in view of Perrier et al., and further in view of Valdner. Claims 31, 32, and 34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Valdner in view of U.S. Patent No. 5,911,493 issued to Walker. Claim 33 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Valdner in view of U.S. Patent No. 6,270,230 B1 issued to Mai.

By this Amendment, Claims 26-29, 31, 32, and 35-69 have been cancelled without prejudice or disclaimer of the subject matter recited therein to simplify issues for the Examiner and to advance the application to allowance. Claims 21-23, 25, 30, 33 and 35 have been amended. New Claims 70-75 have been added. The Applicant hereby reserves the right to pursue all cancelled claims in continuation and/or divisional applications.

The Applicant submits that no new matter has been added to the application by this Amendment. For example, support for the amendments to the claims appears throughout Applicant's originally filed application, including page 7, line 16 to page 7, line 7; page 9, line 14 to page 10, line 8; and page 10, line 9 to page 11, line 2.

Discussion Of Interviews:

Applicant expresses appreciation for the courtesies extended by the Examiner to Applicant's representative Arnold Turk during a July 25, 2006 personal interview at the

Patent and Trademark Office. During the Interview, amendments to the claims were discussed, including the amendments presented in the present response. Applicant's invention was discussed, and differences between the prior art of record and the amended claims was discussed.

Arguments as included during the interview are present in the remarks included herein.

Additionally, Applicant expresses appreciation for telephone conversations with the Examiner on August 1 and 2, 2006 wherein the Examiner indicated that the Interview Summary will be mailed shortly. Moreover, the amendment to claim 21 herein was briefly discussed with the Examiner, and the Examiner indicated that he would consider the amendment upon submission of a written response.

Discussion Of Applicant's Amended Claims:

Applicant's independent claim 21 is directed to an umbrella apparatus comprising:

a pole portion adapted to be supported by a support structure, so as to remain in an outdoor location;

an umbrella portion hingedly coupled to the pole portion, the umbrella portion having a plurality of rib members, the umbrella portion being operable between an opened position and a closed position;

a rechargeable electrical power system for providing electrical power to the umbrella apparatus;

a solar energy system having a solar collector disposed above the umbrella portion, the solar energy system being adapted to collect solar energy and convert the solar energy into electrical energy, the solar energy system being conductively coupled to the rechargeable electrical power system, such that the solar energy collected and converted into electrical energy recharges the rechargeable electrical power system;

and

a lighting system having a plurality of light emitting diodes conductively coupled to the rechargeable electrical power system via a conductor and being powered by the rechargeable electrical power system without a need for connection to an AC power outlet, at least one of the light emitting diodes being carried by the umbrella portion and positioned so as to illuminate the area beneath the umbrella portion, and at least a portion of the conductor being carried by at least one of the rib members of the plurality of rib members;

wherein the solar collector is configured so that the degree of exposure of the solar collector remains the same regardless of whether the umbrella portion is in the opened position or in the closed position; and

wherein the umbrella apparatus is adapted to remain in the outdoor location for recharging the rechargeable electrical power system during daylight hours, regardless of whether the umbrella portion is in the opened position or the closed position, and can remain in the outdoor location after daylight hours.

Thus, as discussed with the Examiner during the above-noted personal interview, Applicant's claimed subject matter provides an efficient structure of an umbrella apparatus that is not taught or suggested by the prior art of record. Applicant's recited umbrella apparatus includes a combination of solar, power and lighting elements to provide an efficient and simple to use umbrella apparatus that is configured to illuminate the area beneath the umbrella portion with the umbrella apparatus being capable of remaining at a location, and being powered by a rechargeable electrical power system by solar power without a need for connection to an AC power outlet.

Thus, Applicant's recited umbrella apparatus is designed to provide lighting with a lighting system having a plurality of light emitting diodes conductively coupled to a rechargeable electrical power system via a conductor and being powered by the rechargeable electrical power system without a need for connection to an AC power outlet. At least one of the light emitting diodes is carried by the umbrella portion and

positioned so as to illuminate the area beneath the umbrella portion. Also, at least a portion of the conductor is carried by at least one of the rib members of the plurality of rib members.

Applicant's umbrella apparatus also includes a solar energy system having a solar collector disposed above the umbrella portion, the solar energy system is adapted to collect solar energy and convert the solar energy into electrical energy, the solar energy system is conductively coupled to the rechargeable electrical power system, such that the solar energy is collected and converted into electrical energy and recharges the rechargeable electrical power system.

Moreover, the solar collector is configured so that the degree of exposure of the solar collector remains the same regardless of whether the umbrella portion is in the opened position or in the closed position.

Still further, Applicant's umbrella apparatus is adapted to remain in the outdoor location for recharging the rechargeable electrical power system during daylight hours, regardless of whether the umbrella portion is in the opened position or the closed position, and can remain in the outdoor location after daylight hours.

The dependent claims further define features of Applicant's umbrella apparatus, and these dependent claims are patentable not only for the features recited in independent claim 21, but also for the features recited in each dependent claim.

Reference To Related Applications and Reexamination Proceeding:

Further to Applicant's Information Disclosure Statement filed January 13, 2006, Applicant once again brings to the Examiner's attention U.S. Patent Application Nos. 11/199,956 and 10/829,790, and Inter Partes Reexamination Proceeding No. 95/000,104 based upon parent U.S. Patent No. 6,612,713. In particular, it is noted that Application No. 11/199,956 is a continuation of the present application, and 10/829,790 is a continuation-in-part of the present application. An obviousness-type double

patenting rejection has been made in the instant Office Action over claims of Application No. 10/829,790.

Applicant further notes that an Office Action has been mailed in the Reexamination Proceeding on September 28, 2005 to which responses have been filed by the Patent Owner and the Third Party Requester. Accordingly, the Reexamination Proceeding is presently awaiting action by the Patent and Trademark Office.

The Examiner is requested to review the Office Action in the Reexamination Proceeding as well as the responses to the Office Action. If the Examiner needs copies any of the documents from the Reexamination Proceeding and/or any of the related applications, the Examiner is respectfully requested to contact the undersigned.

Provisional Rejections Under Obviousness-Type Double Patenting:

Claims 21-34 stand rejected under the judicially created doctrine of obviousness-type double patenting over Claims 78-92 of U.S. Application No. 10/829,790. The rejection asserts that Claims 21-34 are identical to Claims 78-92 of U.S. Application No. 10/829,790. United States Application No. 10/829,790 is commonly owned and is copending with the subject application. Following this assertion of the claims being identical, the rejection contends that, "It would have been obvious to one having ordinary skill in the art at the time of the invention to meet the limitations of claims 21-34 of the instant application with the claimed features of claims 78-92 of the copending application 10,829,790."

Original Claim 21 included the following feature not present in Claim 78 of U.S. Application No. 10/829,790: "wherein the solar energy system is configured to remain in a fixed position relative to the pole portion when the canopy portion is operated between an opened position and a closed position." Thus, Claims 21-34 of the subject application and Claims 78-92 of the U.S. Application No. 10/829,790 are not identical. Moreover, the rejection is without appropriate basis in that differences between the claimed subject matter is not indicated in the rejection, and the rejection does not indicate what

changes are required and/or where any motivation is provided. Still further, , Claim 21 is hereby amended.

Nevertheless, because the Examiner's rejection is a provisional double-patenting rejection, the Applicant respectfully requests that upon allowance of the claims in the subject application, the Examiner pass the subject application to issuance.

Rejections Under 35 U.S.C. § 102(b):

Claims 21, 23, 24, 29, and 30 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Valdner.

The Examiner states that Valdner discloses an umbrella apparatus 10 (Figure 1) comprising: a canopy portion 24 hingedly coupled to a pole portion 12 (Figure 1, column 2, line 9); a rechargeable electrical power system 44 – rechargeable battery – energizing the umbrella apparatus 10 (Figure 1, column 2, lines 37 and 38); a solar power system 38 disposed on the top of the pole portion 12 above the canopy 24 (Figure 1, column 2, lines 37-43); the solar power system 38 able to collect solar energy, and convert solar energy into electrical energy; the solar power system conductively coupled, with electrical wires (Figures 3 and 8 column 2, lines 37-43) to the rechargeable electrical power system 44; the electrical energy converted from the solar energy by the solar power system 38 being used for recharging the rechargeable electrical energy system 44 (Figure 1, column 2, lines 37-43); the solar system 38 being in fixed position relative to the pole portion 12, and does not move when the canopy portion operated between the opened and close position (Figures 5 and 6); the rechargeable energy system 44 disposed by the second housing below the canopy portion 12 (Figure 1); a recharging system 56 receiving power from AC power outlet 54 for recharging the rechargeable energy system 44 (Figures 1 and 3, column 2, lines 37-43); a rechargeable electrical power system 44 detachable from the umbrella apparatus 10, and attachable to a remote an AC docking station receiving power plug 58 (Figure 3, column 2, lines 37-43); and a releasable plug 46 conductively coupling the

rechargeable electrical power system 44 to the solar power system 38 (Figures 1 and 3, column 2, lines 34-43).

The Valdner device is a hand-held, air-cooled umbrella. The umbrella 10 has a rod 12, a handle 14 with hand grips 16, a top spring 18, a runner 20, a plurality of stretchers 22, and a collapsible canopy 24. The umbrella 10 includes flat ribs 26 with holes 28 to vent hot air from under the canopy 24. An electric fan 30 powered by an electric motor 32 is built into the rod 12. A solar cell panel 38 mounted to the apex of the canopy 24 provides power to the electric fan 30 on hot sunny days. In addition, the umbrella 10 includes a rechargeable handle battery pack 44 that plugs into the bottom end of the handle 14 to supply power to the electric fan 30 on hot sunless days and at night when there is no solar energy available. The rechargeable handle battery pack 44 may be charged utilizing a separate charger assembly 54 having plugs 58 for plugging into an AC power outlet.

Claim 21 is hereby amended. The Applicant submits that Valdner does not anticipate amended Claim 21, because Valdner does not teach or disclose each element of the invention as claimed in amended Claim 21.

Valdner does not mention, suggest, disclose, or teach a lighting system in any form or fashion. The only electrically powered device disclosed by Valdner is the electric fan 30. On the other hand, the claimed invention includes a lighting system having a plurality of light emitting diodes. In the claimed invention, the lighting system is conductively coupled to and powered by the rechargeable electrical power system. Valdner makes no mention of such a lighting system.

Furthermore, Valdner does not mention, suggest, disclose, or teach the combination of features recited in Applicant's independent claim 21. For example, Valdner does not teach or suggest, amongst other features recited in claim 21, a pole portion adapted to be supported by a support structure, so as to remain in an outdoor location; a lighting system having a plurality of light emitting diodes conductively coupled to the rechargeable electrical power system via a conductor and being powered by the rechargeable electrical power system without a need for connection to

an AC power outlet, at least one of the light emitting diodes being carried by the umbrella portion and positioned so as to illuminate the area beneath the umbrella portion, and at least a portion of the conductor being carried by at least one of the rib members of the plurality of rib members; the solar collector being configured so that the degree of exposure of the solar collector remains the same regardless of whether the umbrella portion is in the opened position or in the closed position; and the umbrella apparatus being adapted to remain in the outdoor location for recharging the rechargeable electrical power system during daylight hours, regardless of whether the umbrella portion is in the opened position or the closed position, and can remain in the outdoor location after daylight hours.

Valdner discloses what appears to be a hand held umbrella that is not designed to remain in a location, but appears to be designed to be carried by handgrip 16. Also, although Valdner discloses a solar cell panel 38 mounted to the apex of the canopy 24 (see column 2, lines 20-21), Valdner clearly does not disclose a solar collector configured so that the degree of exposure of the solar collector remains the same regardless of whether the umbrella portion is in the opened position or in the closed position; rather, Valdner shows solar cell panel 38 changing orientation relative to the rod 12 when the canopy 24 is operated between an opened position and a closed position. The different orientations of solar cell panel 38 are clearly shown in Figures 2 and 5. In Figure 2, solar cell panel 38 is shown in a generally horizontal position, but in Figure 5, solar cell panel 38 is shown folded down into a generally vertical orientation. Because solar panel cell 38 changes its orientation, it would not be as efficient at collecting solar energy as a solar collector that remains in a position so that the degree of exposure when the umbrella is opened or closed would be essentially the same.

For at least these reasons, Valdner fails to disclose all of the limitations of Claim 21, as amended. As such, the Applicant submits that Valdner does not anticipate amended Claim 21, and that amended Claim 21 is now in condition for allowance. Therefore, the Applicant respectfully requests that amended Claim 21 be allowed.

Claim 29 is hereby cancelled. Claims 23, 24, and 30 are dependent claims based upon Claim 21, as amended. As such, the Applicant submits that Valdner fails to disclose all of the limitations of each of Claims 23, 24, and 30 and that Valdner does not anticipate Claims 23, 24, and 30. Because Claims 23, 24, and 30 are dependent claims based upon an allowable independent claim, the Applicant submits that Claims 23, 24, and 30 are also allowable and are now in condition for allowance. Therefore, the Applicant respectfully requests that Claims 23, 24, and 30 be allowed.

Claims 21 and 22 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Small.

The Examiner states that Small discloses a beach umbrella apparatus (Figure 1) comprising: a canopy portion 11 hingedly coupled to a pole portion 10 (Figure 1, column 1, lines 47-50); a rechargeable electrical power system 35 – rechargeable battery – energizing the umbrella apparatus (Figure 1, column 2, lines 29-31); a solar power system 34 disposed on the top of the pole portion 10 above the canopy 11 (Figure 1, column 2, lines 29-31); the solar power system 34 able to collect solar energy, and convert solar energy into electrical energy; the solar power system 34 conductively coupled, with electrical wires (Figure 1, column 2, lines 29-37) to the rechargeable electrical power system 35; the electrical energy converted from the solar energy by the solar power system 35 being used for recharging the rechargeable electrical energy system 34 (Figure 1, column 2, lines 29-37); the solar system being in fixed position relative to the pole portion 10, and does not move when the canopy portion 11 operated between the opened and close position (Figure 1); and the rechargeable battery 34 positionable in the housing carrying the solar system 35 (Figure 1, column 2, lines 29-37).

The Small device is an umbrella having an electrical opening and closing system. Small teaches the use of a conventional battery in combination with a solar battery (solar collector) arranged upon the top of the umbrella, which provide a source of electricity for powering a drive motor (and associated pulley system) for moving the umbrella (see column 1, lines 18-24). The umbrella is driven by the motor 29 between

an open and closed position (column 2, lines 46-48). The solar battery 34 is located at the top center of the umbrella at the upper end of the post 10 (see Figure 1, column 2 lines 28-31). On sunny days, the solar battery 34 is charged to in turn charge the battery 35 (see column 2, lines 53-58). The umbrella has a manually operable crank 23 for operating the opening and closing mechanism if the power of the storage battery 35 is insufficient to operate the opening and closing of the umbrella (see column 1, lines 65-70 and column 2, lines 65-72).

Claim 21 is hereby amended. The Applicant submits that Small does not anticipate amended Claim 21, because Small does not teach or disclose each element of the invention as claimed in amended Claim 21.

As with Valdner, Small does not mention, suggest, disclose, or teach a lighting system in any form or fashion, or the combination of features as recited in Applicant's claims 21. For the sake of brevity, Applicant is not repeating each of the arguments as set forth above. However, it is noted that that only electrically powered device disclosed by Small is the motor for opening and closing the umbrella. On the other hand, the claimed invention includes a lighting system having a plurality of light emitting diodes. In the claimed invention, the lighting system is conductively coupled to and powered by the rechargeable electrical power system. Small makes no mention of such a lighting system.

For at least these reasons, Small fails to disclose all of the limitations of Claim 21, as amended. As such, the Applicant submits that Small does not anticipate amended Claim 21, and that amended Claim 21 is now in condition for allowance. Therefore, the Applicant respectfully requests that amended Claim 21 be allowed.

With regard to Claim 22, Small does not mention, suggest, disclose, or teach a rechargeable electrical power system and a solar energy system both carried by a **single** housing **releasably** mounted on the pole portion above the umbrella portion. In the Small device, the solar battery 34 is supported on the upper end of the post 10, and the storage battery 35 is either internal to the pole or external to the pole. Small makes no mention or suggestion of providing a single housing for both the solar battery and

the storage battery, and makes no mention or suggestion of allowing the single housing to be releasable from the pole.

Furthermore, Claim 22 is a dependent claim based upon Claim 21, as amended. As set forth above, Small does not teach, mention, suggest, or disclose a lighting system. For these reasons, the Applicant submits that Small fails to disclose all of the limitations of Claim 22 and that Small does not anticipate Claim 22. Because Small does not mention, suggest, disclose, or teach a rechargeable electrical power system and a solar energy system both carried by a **single housing releasably** mounted on the pole portion above the umbrella portion, and because Claim 22 is a dependent claim based upon an allowable independent claim, the Applicant submits that Claim 22 is allowable and now in condition for allowance. Therefore, the Applicant respectfully requests that Claim 22 be allowed.

Rejections Under 35 U.S.C. § 103(a):

Claims 25 and 26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Small in view of Perrier et al.

Regarding Claim 25, the Examiner states that Small discloses a beach umbrella apparatus (Figure 1) comprising a canopy portion hingedly coupled to a pole portion; a rechargeable electrical power system energizing the umbrella apparatus; and a solar power system disposed on the top of the pole portion above the canopy. The Examiner concedes that the umbrella disclosed by Small is a free-standing umbrella on the ground and that Small does not disclose details of the base of the umbrella. The Examiner relies upon Perrier et al. for this feature.

The Examiner states that Perrier et al. disclose a solar-powered umbrella apparatus 1 (Figure 1) comprising: a canopy portion 8 hingedly coupled to a pole portion 9 (Figure 1, English translation, page 2, line 1); and a pole portion 9 received in a removable, by removing the adjustable screw, base assembly 4 - the combination of a sleeve integral with a base plate (Figure 1). The Examiner asserts that it would have

been obvious to one of ordinary skill in the art at the time of the invention to modify the umbrella apparatus of Small by providing the base assembly as taught by Perrier et al. for mounting the apparatus on the ground in a stable position.

The Applicant reiterates here the distinguishing remarks set forth herein with regard to Small. As discussed in detail herein, Small discloses an umbrella employing a conventional battery in combination with a solar battery (solar collector) arranged upon the top of the umbrella, which provides a source of electricity to power a drive motor (and associated pulley system) for moving the umbrella between open and closed positions (see column 1, lines 18-24). However, Small does not teach, mention, suggest, or disclose at least a lighting system or other features recited in Applicant's claims.

The Perrier et al. device is an umbrella with a ventilated light and other accessories. The umbrella 1 has a hollow mast 9, a housing 10 having openings 11, a canopy 8, stays 15 to which the canopy 8 is attached, a base 4, batteries 3 carried in the base 4, a cord 6 and a pulley 7 for controlling the canopy 8, a light 12 carried within the hollow mast 9, a solar collector 2 for recharging the batteries 3, and a power cord 14 for connecting to an alternate source of energy. The canopy 8 is composed of either: (1) a perforated fabric; or (2) an impermeable unperforated fabric having a valence 23 held at the end of supports 24 that forms a peripheral gutter for draining off water. The solar collector 2 covers all or part of the canopy 8. The light 12 is equipped with a ventilated protective tube 13 made of perforated metal, screen, Plexiglas, glass, or a translucent or colored sleeve. Another light 25 is located in the base 4.

Claim 25 is not hereby amended; however, Claim 25 is a dependent claim that is dependent upon Claim 21, which is hereby amended. The Applicant submits that neither Small nor Perrier et al., either alone or in combination, disclose all of the limitations of Claim 25.

Perrier is utilized in the rejection merely for its disclosure of a base. Accordingly, whether or not it would have been obvious to incorporate a base with Small, the

instantly claimed invention would not be at hand. Accordingly, for at least this reason, the rejection of record should be withdrawn.

Still further, Perrier et al. make no mention, teaching, suggestion, or disclosure of a lighting system having a plurality of light emitting diodes conductively coupled to and powered by a rechargeable electrical power system. Instead, Perrier et al. disclose a light 12 carried within the hollow mast 9, the light 12 being equipped with a ventilated protective tube 13 and/or ventilation holes 16 to prevent overheating (see English translation Figures 1 and 2, pages 2 and 5). Clearly, because Perrier et al. expressly discuss concerns with overheating, Perrier et al. do not contemplate the use of light emitting diodes. Indeed, Perrier et al. add additional components to their device to accommodate the extreme heat generated by their lighting element. This clearly teaches away from the claimed invention. One having ordinary skill in the art would not have been motivated to include light emitting diodes into a hollow mast such as disclosed by Perrier et al.

Moreover, the location of the lights in the Perrier et al. device are in very undesirable locations and create additional design problems. Locating the ventilated light 12 in the pole is undesirable for several reasons. First, incorporating the light fixture into the pole makes the pole less strong. The light fixture and the ventilation tube would typically not be as strong as the material from which the pole is constructed. The extra joints would make the pole less strong and harder to manufacture, assemble, ship, and maintain. Second, with the light located on the pole above the hub, shadows from the hub, struts, cords, and pulleys are cast directly into the area that is supposed to be illuminated. Third, the light that does get through these obstacles shines directly into the faces of the users under the canopy, which is very distracting and undesirable. Fourth, because the lights in the Perrier et al. device are susceptible to overheating, they pose a safety risk, particularly if the canopy is in a closed position, where the canopy prevents circulation of cooling air around the light.

On the other hand, because the lighting systems in the claimed invention do not generate excessive heat, the lighting systems can be disposed in close proximity to the

canopy without the danger of overheating. The lighting systems in the claimed invention do not cast undesirable shadows on the users. To the contrary, in the claimed invention, at least one of the light emitting diodes is carried by the umbrella portion and positioned so as to illuminate the area beneath the umbrella portion

As for the lights in the base of the Perrier et al. device, these lights are of very little practical use, and are undesirable for various reasons, as well. First, when the umbrella is used with a table, the lights are located directly beneath the users' feet, which makes the lights susceptible to damage and/or breakage. Second, most of the light generated by these lights would be blocked by the users' feet, purses, bags, and other things located under the table. Third, because these lights in the base only shine upward, any light that does make it up through the obstacles under the umbrella would create a glare and actually make it more difficult for a user to read or conduct activities under the umbrella. Fourth, these lights in the base are susceptible to damage and breakage from various sources, including, weather, the environment, dirt, debris, and the pole itself, as the pole is removed and replaced into the base unit.

Moreover, Perrier et al. do not disclose a lighting system having a plurality of light emitting diodes conductively coupled to the rechargeable electrical power system via a conductor and being powered by the rechargeable electrical power system without a need for connection to an AC power outlet, at least one of the light emitting diodes being carried by the umbrella portion and positioned so as to illuminate the area beneath the umbrella portion, and at least a portion of the conductor being carried by at least one of the rib members of the plurality of rib members. Still further, Perrier et al. do not disclose a solar collector configured so that the degree of exposure of the solar collector remains the same regardless of whether the umbrella portion is in the opened position or in the closed position. Still further, Perrier et al. do not disclose an umbrella apparatus adapted to remain in an outdoor location for recharging the rechargeable electrical power system during daylight hours, regardless of whether the umbrella portion is in the opened position or the closed position, and can remain in the outdoor location after daylight hours.

In the Perrier et al. device, the solar collector 2 covers all or only part of the canopy (English translation Figures 1 and 2, page 2). In Perrier et al., solar collector 2 is attached to canopy 8 such that when the canopy portion is operated between an opened position and a closed position, the degree of exposure of solar collector 2 would not be essentially the same.

The configuration of Perrier et al. is undesirable for several reasons. First, because the solar collectors move with the canopy, they are ineffective and/or inoperable when the canopy is in the closed position. When the canopy is in the closed position, the folds of the collapsed canopy hide a significant portion of the solar collectors, making the solar collectors ineffective and/or inoperable. Furthermore, even if parts of the solar collector 2 are exposed when the canopy 8 is in the down position, the solar collector 2 is in a substantially vertical position, which is very ineffective for collecting solar energy.

For at least these reasons, Small taken alone in combination with Perrier et al. fails to disclose all of the limitations of Claim 25. As such, the Applicant submits that it would not have been obvious to one of ordinary skill in the art at the time of the invention to modify the umbrella apparatus of Small by providing the base assembly as taught by Perrier et al. for mounting the apparatus on the ground in a stable position, and that Claim 25 is now in condition for allowance. Therefore, the Applicant respectfully requests that Claim 25 be allowed.

Claim 26 is hereby cancelled, rendering the Examiner's rejection of Claim 26 moot.

Claims 27 and 28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Small in view of Perrier, and further in view of Valdner.

Claims 27 and 28 are hereby cancelled, rendering the Examiner's rejection of Claims 27 and 28 moot.

Claims 31, 32, and 34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Valdner in view of Walker.

Claims 31 and 32 are hereby cancelled, rendering the Examiner's rejection of Claims 31 and 32 moot.

Regarding Claim 34, the Examiner states that "Valdner ('975) discloses a solar energy based umbrella apparatus meeting the limitations, except the following, in similar manner as that applied to claims 21 and 31 detailed above and in section 3 of this office action." The Examiner further states that Valdner additionally discloses a solar energy based umbrella apparatus further including: a hub 20 movable along the pole portion 12 (Figures 1 and 4, column 2, lines 9-13).

The Applicant reiterates here all of the distinguishing remarks set forth herein regarding Valdner. In particular, the Applicant reiterates that Valdner makes no mention, suggestion, teaching or disclosure, of including a lighting system having a plurality of LED's on an umbrella or the combination of elements as recited in Applicant's independent claim 21.

The Walker device is a lighted umbrella that uses high-voltage rope lighting. Walker discloses an umbrella 10 including a post 12, a plurality of ribs 16 and a canopy supported on the ribs 16. The umbrella further includes a light source in the form of a length of rope lighting 32 carried by and extending along each of the ribs (see Figures 1 and 2). Separate downwardly opening, elongate channels 30 are secured to the undersides of the ribs 16. A light source in the form of rope lighting 32 (see column 2, lines 21-25) is pressed into each channel 30. The umbrella 10 also has a hub 14 that is fixed to the upper end of the pole 12 (see column 1, lines 66-67). The hub 10 carries a plurality of electrical sockets 24 (see column 2, lines 8-9). The radially inner end of each length of rope lighting 32 includes a plug 34 which is pushed into the adjacent socket 24 (carried by hub 14) and subsequently connected to a source of electricity (column 2, lines 25-35).

Claim 34 is not hereby amended; however, Claim 34 is a dependent claim that is dependent upon Claim 21, which is hereby amended. The Applicant submits that neither Valdner nor Walker, either alone or in combination, disclose all of the limitations of Claim 34.

Walker does not mention, teach, suggest or otherwise disclose, an umbrella having a rechargeable electrical power system, a solar energy system or light emitting diodes. To the contrary, Walker teaches the use of rope lights, which are typically powered by high-voltage power supplies, such as typical 120 Volt AC, as is commonly found in homes. Such rope lights would require more power than could be supplied by rechargeable batteries that are recharged by a solar energy system mounted on the umbrella. Thus, Walker teaches away from the use of batteries and/or solar collectors as power supplies. Using conventional batteries to power rope lights which require high voltages is not easily or economically accomplished. On the other hand, the present invention is well suited for use any distance away from external power sources since the rechargeable batteries are conveniently recharged by the solar collectors, and the light emitting diodes require far less electrical power.

Walker does not disclose a lighting system having a plurality of light emitting diodes conductively coupled to the rechargeable electrical power system via a conductor and being powered by the rechargeable electrical power system without a need for connection to an AC power outlet, at least one of the light emitting diodes being carried by the umbrella portion and positioned so as to illuminate the area beneath the umbrella portion, and at least a portion of the conductor being carried by at least one of the rib members of the plurality of rib members. Still further, Walker does not disclose a solar collector configured so that the degree of exposure of the solar collector remains the same regardless of whether the umbrella portion is in the opened position or in the closed position. Still further, Walker does not disclose an umbrella apparatus adapted to remain in an outdoor location for recharging the rechargeable electrical power system during daylight hours, regardless of whether the umbrella portion is in the opened position or the closed position, and can remain in the outdoor location after daylight hours.

For at least these reasons, Valdner whether taken alone or in combination with Walker fails to disclose all of the limitations of Claim 34. As such, the Applicant submits that it would not have been obvious to one of ordinary skill in the art at the time of the invention to modify the umbrella apparatus of Valdner by providing the rope lighting of

Walker, and that Claim 34 is now in condition for allowance. Therefore, the Applicant respectfully requests that Claim 34 be allowed.

Claim 33 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Valdner in view of Mai.

The Examiner states that Valdner discloses a solar energy based umbrella apparatus comprising a plurality of rib members supporting a collapsible cover; and a battery-based power system rechargeable with solar power system. The Examiner concedes that Valdner does not teach the disclosed umbrella assembly including a lighting system carried by the collapsible cover, and the lighting system being conductively coupled to the rechargeable lighting system. The Examiner further states that Mai discloses an umbrella apparatus including a lighting system 83 carried by the collapsible cover 30 (Figure 1, column 2, lines 64-65). The Examiner concludes that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the umbrella apparatus of Valdner by providing and positioning the lighting system as taught by Mai for the benefits of high attention and decorative values of the device.

The Applicant reiterates here all of the distinguishing remarks set forth herein regarding Valdner. In particular, for example, the Applicant reiterates that Valdner makes no mention, suggestion, teaching, or disclosure, of including a lighting system having a plurality of LED's on an umbrella.

The Mai device is an umbrella with an alert device. Mai discloses a handheld umbrella body 2 having an attached umbrella cover 3. The umbrella cover 3 comprises a plurality of gores 30 sewn edge to edge to form a circular covering. A combination of stretchers 50 and ribs 20 fully stretch and open the umbrella. The umbrella system disclosed by Mai further comprises an alert device 80 which comprises a battery receiver 81 mounted below the umbrella cover, a battery 82 stored in the receiver 81, the battery being used to provide power to a plurality of light emitting diodes 83 distributed on the gores 30 of the umbrella cover 3 (see column 2, lines 40-67). In operation, the Mai alert device serves to increase visibility of the user of the handheld umbrella, so that drivers around the user can easily be aware of the location of the user, thereby preventing

accidents (see column 3, lines 32-36). The Mai device includes battery-powered LED's 83 held within transparent strips 84 that are sealed to the top of cover 3.

The Mai device is a handheld umbrella used primarily for increasing the visibility of the user to nearby drivers and lowering the chance of the user being struck by the drivers. In the Mai umbrella, the lights are not intended to shine under the umbrella to provide light under the umbrella. To the contrary, in Mai, the lights are placed on the top side of the cover and shine out to provide a beacon. Because the Mai device is only used to warn others on dark, rainy nights, there is no motivation for Mai to add rechargeable batteries and a solar energy recharging system. Thus, the Applicant submits that Mai teaches away from the claimed invention.

Mai fails to disclose several features of the claimed invention. Specifically, Mai does not mention, suggest, teach, or otherwise disclose, a rechargeable electrical power system, and Mai does not mention, suggest, teach, or otherwise disclose, the use of a solar energy system to recharge the rechargeable electrical power system.

On the other hand, the present invention is a solar powered umbrella having a lighting system that is conductively coupled to a rechargeable electrical power source. The rechargeable electrical power source is conductively coupled to the solar energy system, so as to be recharged by the solar energy system. In the claimed invention, the lighting system is coupled to the collapsible cover, so as to illuminate the area **beneath** the umbrella portion.

Claim 33 is hereby amended to clarify that the lighting system is configured to illuminate the area beneath the canopy portion. In addition, Claim 33 is a dependent claim that is dependent upon Claim 21, which is also hereby amended. The Applicant submits that neither Valdner nor Mai, either alone or in combination, disclose all of the limitations of Claim 33.

For at least these reasons, Valdner whether taken alone or in view of Mai, fails to disclose all of the limitations of Claim 33. As such, the Applicant submits that it would not have been obvious to one of ordinary skill in the art at the time of the invention to

modify the umbrella apparatus of Valdner by providing the lighting of Mai, and that Claim 33 is now in condition for allowance. Therefore, the Applicant respectfully requests that Claim 33 be allowed.

The Applicant maintains and reiterates here the arguments previously presented in the Applicant's response to an Office Action mailed to the Applicant on 21 September 2005, selected portions of which are reproduced herein for the Examiner's convenience.

Statements of Support for New Claims:

New Claims 70-75 are hereby added. The Applicant submits that support for each element and feature of each and every new claim may be found in the various embodiments of the application at various locations throughout the application, including the figures.

CONCLUSION:

In view of the foregoing amendments and remarks, the Applicant respectfully submits that the application is now condition for allowance, and earnestly solicits an early reconsideration and a Notice of Allowance.

Enclosed is a check in the amount of \$395.00 to cover the RCE Filing Fee. No other fees are deemed to be necessary; however, the undersigned hereby authorizes the Commissioner to charge any fees that are necessary, or credit any overpayments, to **Deposit Account No. 502806.**

Please link this application to Customer Nos. 50779 and 38441 so that its status may be checked using the PAIR System.

Respectfully submitted,

8/3/06
Date

James E. Walton
James E. Walton
Registration No. 47,245
Law Offices of James E. Walton, P.L.L.C.
1169 N. Burleson Blvd., Suite 107-328
Burleson, Texas 76028
(817) 447-9955 (Voice)
(817) 447-9954 (Facsimile)
jim@waltonpllc.com
CUSTOMER NOS. 50779 AND 38441

Arnold Turk
Registration No. 33,094
Greenblum & Bernstein, P.L.C.
1950 Roland Clarke Place
Reston, Virginia 20191
(703) 716-1191

ATTORNEYS FOR APPLICANT